

COORDINATING DRAFT**ANNEX D
HEALTH AND SAFETY**

PRIMARY AGENCY: Washington State Department of Health

PRIMARY AGENCIES: Washington State Department of Agriculture
Washington State Department of Fish and Wildlife
Washington State Department of Labor and Industries
Washington State Military Department
Emergency Management Division
National Guard
Washington State Patrol
Washington State Department of Transportation
Other State Agencies

I. INTRODUCTION**A. Purpose**

Compliance with health and safety regulations requires that a health and safety program cover personnel involved in recovery efforts. The U.S. Occupational Safety and Health Administration (OSHA) regulations governing health and safety at hazardous waste operations and during the recovery activities to a hazardous substance release contain general requirements for safety and health programs, site characterization and analysis, site control, training, medical surveillance, engineering controls, work practices, personal protective equipment, exposure monitoring, informational programs, material handling, decontamination, emergency procedures, illumination, sanitation, and site excavation.

B. Background

Personnel responding to environmental incidents involving hazardous substances may encounter a wide range of physical and chemical hazards. To ensure the safety of reentry and recovery personnel, an effective, comprehensive health and safety program must be established and followed. The minimum components of the health and safety program include:

1. A Medical Surveillance Program which includes the following elements:
 - a. Pre-employment medical examination to establish the individual's state of health, baseline physiological data, and ability to wear personnel protective equipment.
 - b. Follow-up medical examinations performed annually or more often due to known or suspected exposures.
 - c. Termination examination conducted at the end of employment.

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- d. Permanent maintenance of all personnel medical records.
- 2. Emergency Medical Care and Treatment
 - a. Basic first aid and emergency lifesaving Cardio-Pulmonary Resuscitation (CPR) training for all personnel.
 - b. Refresher training for first aid and emergency lifesaving CPR.
 - c. Site-specific medical emergency procedures. Detailed procedures are part of the Site Safety Plan.

3. Health and Safety Training.

All personnel involved in reentry and recovery activities for environmental incidents and who could be exposed to hazardous substances and other health hazards must receive a Basic Health and Safety Training Course including:

- a. Use of personal protective equipment.
- b. Safe work practices and standard operating procedures.
- c. Hazard recognition and evaluation.
- d. Medical surveillance requirements.
- e. Site safety plan and plan development.
- f. Site control and decontamination.
- g. Site entry and use of monitoring equipment.
- h. Training for sampling of hazardous materials.
- i. Annual refresher training courses in safety, first aid, and CPR.

Anyone who directs activities on a hazardous waste site is considered a supervisor and is required to attend an additional safety training course for supervisors.

II. Policies

State and local regulations and the Environmental Protection Agency's (EPA) Standard Operating Safety Guides supplement the OSHA regulations and will also be considered when developing worker health and safety programs. Standard operating safety procedures will be developed and written by competent safety professionals and include safety precautions and operating practices that all responding personnel will follow. All personnel involved in site activities must have access to copies of the safety procedures and be briefed on their use. Standard operating procedures will include guidelines for personnel precautions, weather conditions, and site survey and reconnaissance.

COORDINATING DRAFT**III. Situation****A. Emergency/Disaster Conditions and Hazards**

A site safety plan will be developed for each level of operations and will be implemented for all phases of site operations in accordance with the appropriate OSHA regulations. The plan should be conspicuously posted or distributed to and discussed with all reentry and recovery personnel. All personnel must be familiar and act in compliance with the site safety plan, which will include:

1. Names of key personnel and alternates.
2. Names of health and safety personnel.
3. Operation safety and health risk analysis.
4. Employee training.
5. Personal protective equipment to be used.
6. Frequency and types of air monitoring, personnel monitoring, and sampling techniques.
7. Site control measures.
8. Decontamination procedures.
9. Site standard operating procedures.
10. Site contingency plan.
11. Confined space entry procedures.
12. Medical surveillance program.
13. Location and route to the local hospital.

B. Planning Assumptions

1. An assessment of mental health needs and the provision of mental health services to disaster victims and emergency workers will be made.
2. Special needs groups and their demands on mental health responders will be identified.
3. Behavior patterns and responses of disaster victims will be known.
4. Techniques and procedures for handling disaster relief workers under stress will be employed.

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IV. CONCEPT OF OPERATIONS

A. General

Emergency management in Washington is addressed in the Revised Code of Washington (RCW), Title 38, Chapter 38.52 (1991).

Section 38.52.005 places responsibility for state emergency management within the Washington State Military Department. The Director's enumerated duties include, developing and maintaining an all-hazard state emergency plan; managing related training and public information programs; serving as liaison with political subdivisions, other states, and the federal government; managing response operations; and appointing a state coordinator for radioactive and hazardous waste emergency response programs, Section 38.52.030.

B. Recovery Planning Requirements

The following activities must be considered by local authorities and the Recovery and Resource Group (RRG) in the event of an emergency requiring recovery activities. Support will be provided by state and federal agencies in the form of recommendations, plan development, and implementation. **(This guidance must be reviewed by L&I based on their responsibilities described in the CEMP, ESF 10, Para IV, E, 2, g.)**

1. Site-specific information to include the following will be maintained and kept current:
 - a. Inventories of valuable resources that must be fed, protected, or otherwise managed.
 - b. Environmental impact statement(s).
 - c. Maps with political boundaries, roads, bridges, and trails, topography. Soil types, oil types, geomorphology, monitoring and sampling grids, property boundaries, land Use, including mining and agricultural, community; facilities, nursing homes, prisons, water resources and facilities and utilities including drainage systems.
 - d. Meteorological data.
 - e. Databases of demographic data, taxes and property value, and commercial and economic value.
 - f. Telephone directories.
 - g. Aerial photographs and satellite imagery.
 - h. Information on local hunting seasons, game farms, and wild harvesting.

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2. Residual hazard evaluation from an incident involves determining the extent of residual hazards posed by contamination or related hazards including localized air concentrations, as well as any contamination of buildings, equipment, water, soil, vegetation, crops persons, personal effects, and animals. Exposure routes of concern are dermal contact, inhalation of vapors from contaminated surfaces, and ingestion.
3. Preliminary assessment for public health and environmental issues are dependent on the amount, duration, and toxicity of the material, the various pathways of exposure, and the potential receptors available to receive such an exposure. Planning to protect the ingestion pathway requires identifying ways that agent contamination could enter the food chain by:
 - a. Identifying the types of resources and facilities present within the planning zones.
 - b. Developing a list that includes, as a minimum, the location of the facility/resource and points-of-contact with current phone numbers.
4. Personnel protection involves both procedures and equipment. Its purpose is to:
 - a. Protect the recovery workers who must enter risk areas from harmful exposure to hazards.
 - b. Allow performance of monitoring, decontamination, and other recovery tasks that require entering the risk areas.
 - c. Monitor and control exposure.
 - d. Provide training, protective equipment and clothing, and medical intervention, as required.
 - e. Record and track entry to controlled areas in order to minimize, equalize, and maintain a record of risk exposure.
 - f. Ensure that personnel at risk from contamination are appropriately trained and equipped.
 - g. Establish procedures for approval of activities that involve risk of contamination exposure.
5. Environmental sampling and data requirements are necessary to determine where a hazardous agent or contaminant has been deposited, so that it may be removed, neutralized, or destroyed, and to determine whether and when people may safely return to their homes and workplaces after an evacuation.
 - a. The Department of the Army, as the On-Scene Coordinator (OSC) for a Chemical Stockpile Emergency Preparedness Program

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(CSEPP) event, will be responsible for sampling soil, air, and water to analyze for contamination by chemical agents on or off-post in a post-incident situation.

- b. State and local personnel who are trained in chemical and radiological awareness and sampling procedures and appropriately clothed and outfitted with protective equipment may accompany all Army CSEPP monitoring teams and participate in all aspects of environmental sample collection, handling, preservation, and analyses activities.

6. Findings and Evaluation.

- a. For the CSEP Program:

The recommendation to reenter areas previously declared off-limits due to measured or suspected military chemical agent contamination will be a joint determination by the Department of the Army (as represented by the Initial Response Force (IRF) or Service Response Force (SRF Commander) and appropriate federal, state, and local officials. When making reentry recommendations, the joint officials will give greatest weight to advice from the health authorities (federal, state, and local).

- b. For All Others:

All food located in an agent-contaminated area should be considered potentially contaminated. For ease in managing the potential ingestion hazard posed by food, all suspect items can be categorized into the three groups:

- (1) Group I. Packaged (glass, metal, plastic, etc.), sealed unopened items that have been exposed only to agent vapor.
- (2) Group II. Packaged unopened items that include an impenetrable wrapper or container (e.g., foil pouch) that have been exposed to agent liquid.
- (3) Group III. Un-packaged Items (e.g., fresh fruit, and vegetables), opened packaged items, or items packaged in untreated paper or cardboard. This group should be destroyed and not used for human or animal food.

- c. Animal husbandry approach would be to shelter farm and companion animals in place; this approach requires foreknowledge of animal inventories and involvement by animal owners and the veterinary community.
- d. Handling of human remains will be made difficult by the potential for secondary contamination, and will make positive identification, recovery of the remains and personal effects, and their return to the

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next-of-kin difficult. An approved forensic examination should precede movement of remains from the place of death.

7. Decision development resulting from data analyses and interpretation.
 - a. The matrix employed in determining the boundaries of agent distribution and the magnitude of agent contamination will need to be tailored to the physical and chemical characteristics of the agent and to the local variables.
 - b. Results of the air and environmental media sampling will be used as the basis for decisions regarding the protection of the public and emergency workers.
 - c. If warning is sufficiently great, harvested food and forage crops should be brought under shelter or covered.
 - d. Medical services during the recovery phase will be aimed at preventing disease, treating victims acutely affected by the event, and assisting community recovery via long-term physical and mental health services.
8. Recovery measures to rectify the environment in the affected area, in conformance with Chemical Accident/Incident Response and Assistance (CAIRA) Manual of applicable federal laws and regulations, will be implemented at the federal and state levels.
 - a. Army restoration and remediation actions for a CSEPP event will proceed according to the CAIRA manual and in conformance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) Appendix A-reference 3) and CERCLA guidance and policy regulations, the Resource Conservation and Recovery Act of 1976 (RCRA) (Appendix A-reference 4), as amended by the hazardous and Solid Waste Amendments of 1984 (HSWA) Plan (NCP) (Appendix A-reference 7), or equivalent state RCRA program, and the National Environmental Policy Act (NEPA) (Appendix A-reference 9).
 - b. The assignment of responsibilities and administrative procedures for recovery is specifically set forth under the statutes and regulations referenced above, the CAIRA manual and the Army Installation Restoration Program.
9. Public Information and Community relations.
 - a. The purpose of public information and community relations during the recovery phase of a disaster is to provide accurate and complete information to the public pertaining to protective actions, health dangers, remediation efforts, available services, and other issues of

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interest. This activity also enables the community to express its interest and preferences regarding the remediation process.

- b. Public information efforts during the recovery phase will focus on informing the public of protective actions, residual hazards, status of assessment and cleanup efforts, and access to assistance and compensation.
- c. Also see Washington State Comprehensive Emergency Management Plan (CEMP), Appendix 2, Tab A, Public Information and Public Education for Radiological and Chemical Hazards.

IV. Responsibilities

A. Primary Agency

Washington State Department of Health

The state Department of Health (DOH) as the lead state agency for Emergency Support Function (ESF) 8, Health and Medical Services, is responsible for providing technical assistance and advice to Local Health Jurisdictions for all public health issues. Specific DOH responsibilities are found in the state CEMP and the Integrated Fixed Facility Radiological and Chemical Protection Plan.

- 1. During the recovery phase, DOH will coordinate and direct monitoring to detect affected areas.
- 2. DOH will develop, in coordination with Washington State Department of Agriculture (WSDA), a prioritized sampling plan of the projected area(s) affected by any Hazardous Material (HAZMAT) spill occurring in the State.
- 3. Contribute to the identification of the geopolitical boundaries of the relocation area(s) and FCAs.
- 4. The State Health Officer will authorize emergency workers to incur exposures in excess of those set forth in the PAGs in the Health procedures.
- 5. The DOH Drinking Water Division provides consultation on public drinking water sources. Drinking water issues will be coordinated with the Washington State Department of Ecology (Ecology).

B. Support Agencies:

1. Washington State Department of Agriculture

The Washington State Department of Agriculture (WSDA) is responsible for preventing the public from consuming adulterated food through oversight of commercial sales and movement of agricultural commodities within the contaminated or quarantined area. WSDA and DOH work in tandem to

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provide a comprehensive approach to the ingestion exposure pathway response. WSDA will:

- a. Embargo all potentially adulterated food until it is shown to be safe by means of testing and analysis.
- b. Assist DOH in obtaining samples for laboratory analysis at Food Access Control Points (FACPs), licensed dairies, farms, processing plants, and wholesale distributors.
- c. Coordinate with county extension agents or agricultural agents who are charged with identifying family and hobby farms in the ingestion pathway Emergency Protection Zone (EPZ) to ensure the operators are aware of the recommended protective actions.
- d. Develop with DOH, a prioritized sampling plan of the projected area(s) affected by any Hazardous Material (HAZMAT) spill occurring within the State.
- e. Contribute to the identification of the geopolitical boundaries of the relocation area(s) and Food Control Areas (FCAs), and the locations for the FACPs.

2. Washington State Department of Fish and Wildlife

- a. Assist local governments with evacuation of the public from department lands and state fisheries. Local jurisdictions provide transportation, law enforcement, and other support, as necessary.
- b. Work cooperatively with other state agencies when the Department of Fish and Wildlife (DF&W) land holdings or facilities fall within the FCAs. Department personnel will be assigned to work cooperatively with the other state agencies to conduct sampling, as well as control access into and out of these areas.
- c. Work with the state EOC Executive Section to ensure the application of protective actions for fish and game in FCAs.

Table of Authorities: Chapter 77.12 RCW.

3. Washington State Department of Labor and Industries

- a. Provide worker health and safety guidance to all jurisdictions involved in hazardous materials operations.

Ensure compliance with OSHA/WISHA requirements.

4. Washington State Military Department

- a. Emergency Management Division

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- (1) Coordinate state agency activities from the state EOC.
- (2) Facilitate the development of the state's Protective Action Decisions (PADs) and coordinate the state's application of those decisions.
- (3) Facilitate the state's adoption of the affected counties' recommended geopolitical boundaries identifying the FCAs and the relocation area(s), including identification of the best locations for Access Control Points (ACPs) and Traffic Control Points (TCPs). This decision-making process will include consultation with the state of Oregon, if necessary.
- (4) In coordination with DOH, WSDA, Washington State Patrol (WSP), the state of Oregon, and adjacent state(s), confirm the staffing and equipment requirements for carrying out traffic control, security, and food control measures, for the relocation area(s), and FCAs, if required.
- (5) At regular intervals, arrange for a full briefing of the state EOC Executive Section on the latest sampling and monitoring data, local jurisdiction decisions, and reentry and recovery efforts.
- (6) Develop estimates of the probable duration and scope of the reentry and recovery efforts based on consultation with the facility and the Federal Emergency Management Agency (FEMA.). Share these estimates with the affected jurisdictions so all state and local jurisdictions can identify the staffing patterns necessary to accomplish shift changes, and resource requests requiring state or federal actions.
- (7) Coordinate the dissemination of public information with the impacted counties at regular intervals.

b. National Guard

- (1) Provide National Guard assistance, when approved.
- (2) Provide transportation support (ground and air), as requested.
- (3) Provide back-up mobile communications, as requested.
- (4) Provide field logistical support as required in the following areas:
 - (a) Mobile command posts.
 - (b) Temporary shelter (lodging).
 - (c) Mass feeding.

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- (d) Logistical support.
- (e) Other resources, as required.

Table of Authorities: Chapter 38.52, and Sections 38.08.040, 38.08.060, 43.06.010, 43.06.270 RCW.

5. Washington State Patrol

- a. The Washington State Patrol (WSP) will conduct traffic control, assist local law enforcement efforts, and coordinate the transportation of samples.
- b. Provide supplemental enforcement services at the ACPs and TCPs with available resources.
- c. Coordinate the provision of additional state law enforcement resources to local law enforcement agencies when requested. This includes the coordination of law enforcement resources with affected counties and the state of Oregon.

Table of Authorities: Sections 43.43.030 and 43.06.270 RCW.

6. Washington State Department of Transportation

- a. Assist WSP, as requested, and coordinate with each affected county to perform traffic control and area access control.
- b. Provide transportation and other logistical support, upon the request of the Director of the state EMD, to affected county or other state agencies, on a noninterference basis with the Washington State Department of Transportation's (WSDOT) primary activities.

Table of Authorities: Chapters 47.01, 47.48, 47.52 RCW.

9. Other State Agencies

- a. The chief executives of other agencies will provide representation to the state EOC, as required. The responsibilities of the chief executive(s) of these agencies may include the provision of personnel and resource support to responding agencies and assignment of public information personnel to support state emergency public information activities.
- b. Each Washington State agency will provide a single point-of-contact for coordinating requests for support, resources, and information exchange concerning emergency reentry and recovery activities. The authorities under which these other agencies will act are their respective Washington State statutes and Chapter 38.52 RCW. The procedures for these agencies support the Washington State CEMP.

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VII. Resource Requirements

Will be determined by the type and magnitude of the emergency or disaster.

VIII. References

- A. Comprehensive Emergency Management Plan, Emergency Support Function 21.
- B. Revised Code of Washington (RCW), Title 38.